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REMARKS

Applicant notes that all correspondence in this case should be addressed to **McGinn & Gibb, PLLC** 8321 Old Courthouse Road, Suite 200, Vienna, VA 22182-3817, (703) 761-4100, **Customer No. 21254.**

An Excess Claim Fee Payment Letter is submitted herewith to cover the cost of five (5) excess independent claims.

A Petition and Fee for One Month Extension of Time is submitted herewith.

Claims 1-75 are all the claims presently pending in the application. Claims 1-3, 5-6, 17, 20-25, 28-31, 36-41, 43-44 and 55 have been amended to more particularly define the invention. Claims 58-75 have been added to claim additional features of the claimed invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and <u>not</u> for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant notes and greatly appreciates that a personal interview was conducted in this case on July 29, 2003. Applicant is grateful for the opportunity to discuss this case with the Examiner, and appreciates the Examiner's helpful comments made during the personal interview.

Further, Applicant notes that at the interview, <u>the Examiner agreed with Applicant's undersigned representative</u> that amending claims 1, 20 and 39 to recite "*for selectively executing at least one of: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to*

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resources of the input set", would overcome the cited references.   Applicant notes that this

Amendment amends claims 1, 20 and 39 in accordance with the Examiner's helpful

suggestion.   Therefore, Applicant respectfully submits that this case is in condition for

immediate allowance.

Applicant gratefully acknowledges that claims 14, 33 and 51 would be allowable if

rewritten in independent form.   As noted above, claims 1, 20 and 39, from which these claims

depend, respectively, have been amended and are in condition for immediate allowance.

Therefore, Applicant respectively submits that all of the claims are in condition for immediate

allowance.

A Supplemental Reissue Declaration will be submitted shortly.

Applicant further notes that the patent will be promptly surrendered by Applicant

upon an indication from the Examiner that the case would otherwise be in condition for

allowance.

Claims 1-13, 15-32, 34-50 and 52-66 are rejected under 35 U.S.C. § 102(e) as being

anticipated by Li (U.S. Patent No. 5,920,859). Claims 1-13, 15-32, 34-50 and 52-66 are

rejected under 35 U.S.C. § 102(e) as being anticipated by Page (U.S. Patent No. 6,285,999).

Claims 1-13, 15-32, 34-50 and 52-66 are rejected under 35 U.S.C. § 102(e) as being

anticipated by Brown (U.S. Patent No. 5,875,446).

These rejections are respectfully traversed in view of the following discussion.

I.   **THE CLAIMED INVENTION**

The claimed invention (as recited, for example, in claim 1, and similarly recited in

claims 20 and 39) is directed to a computer program product, for use with a computer system,

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for directing the computer system to execute a search of information resources, the resources

having content-based links between each other, to identify a desired subset of the information

resources which satisfy a desired criterion. The computer program product includes a

computer-readable medium, means, provided on the recording medium, for directing the

computer system to identify an initial set of information resources, means, provided on the

recording medium, for directing the computer system to define initial authoritativeness

information for the initial set. Importantly, the computer program product also includes

means, provided on the recording medium, for directing the computer system to use the initial

authoritativeness information as input authoritativeness information, for selectively executing

at least one of: producing first authoritativeness information about a set of information

resources pointed to by links in resources of the input set, and producing second

authoritativeness information about a set of information resources having links that point to

resources of the input set. In addition, the computer program product also includes means,

provided on the recording medium, for directing the computer system to produce a final set of

information resources based on at least one of the first and second authoritativeness

information.

In another aspect (e.g., as recited in claim 71 and similarly recited in claims 72-73),

the claimed invention is directed to a computer program product, for use with a computer

system, for directing the computer system to execute a search of information resources, the

resources having content-based links between each other, to identify a desired subset of the

information resources which satisfy a desired criterion . The computer program product

includes a computer-readable medium, means, provided on the recording medium, for

directing the computer system to identify an initial set of information resources, and means,

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provided on the recording medium, for directing the computer system to define initial

authoritativeness information for the initial set. Importantly, the computer program product

also includes means, provided on the recording medium, for directing the computer system to

use the initial authoritativeness information as input authoritativeness information, to

execute: producing first authoritativeness information about a set of information resources

pointed to by links in resources of the input set, and producing second authoritativeness

information about a set of information resources having links that point to resources of the

input set. The computer program product also includes means, provided on the recording

medium, for directing the computer system to produce a final set of information resources

based on the first and second authoritativeness information.

In another aspect (e.g., as recited in claim 74), the claimed invention is directed to a

programmable storage medium tangibly embodying a program of machine-readable

instructions executable by a digital processing apparatus to perform a method of identifying

authoritative web pages, the method including identifying an initial set of web pages,

computing authoritativeness values for web pages in the initial set of web pages based on

links between the web pages in the initial set of web pages, and other web pages, and

identifying a set of authoritative web pages based on the authoritativeness values.

In another aspect (e.g., as recited in claim 75), the claimed invention is directed to a

programmable storage medium tangibly embodying a program of machine-readable

instructions executable by a digital processing apparatus to perform a method of identifying

authoritative web pages, the method including identifying an initial set of web pages

comprising web pages selected based on a key-word based query, web pages which link to the

web pages selected based on the key-word based query and web pages which are linked to

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from the web pages selected based on the key-word based query, computing authoritativeness

values for the web pages in the initial set of web pages, and identifying a set of authoritative

web pages based on the authoritativeness values.

Conventional computer systems obtain a plurality of documents including linked

documents, linking documents, and linked and linking documents.   Such conventional

systems rank documents based only on the quality of the backlinks to the documents.

One aspect (e.g., as recited in claim 1) of the claimed invention, on the other hand,

includes means, provided on the recording medium, for directing the computer system to use

the initial authoritativeness information as input authoritativeness information, for selectively

executing at least one of: producing first authoritativeness information about a set of

information resources pointed to by links in resources of the input set, and producing second

authoritativeness information about a set of information resources having links that point to

resources of the input set (Kleinberg at col. 4, lines 43-65).

Further, another aspect (e.g., as recited in claim 74) of the claimed invention includes

computing authoritativeness values for web pages in the initial set of web pages based on

links between the web pages in the initial set of web pages, and other web pages (Kleinberg at

col. 8, lines 33-38). Further, another aspect (e.g., as recited in claim 75) of the claimed

invention includes identifying an initial set of web pages comprising web pages selected

based on a key-word based query, web pages which link to the web pages selected based on

the key-word based query and web pages which are linked to from the web pages selected

based on the key-word based query (Kleinberg at col. 4, lines 44-65).

These features allow the claimed invention to be more versatile than conventional

systems.

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II.   THE PRIOR ART REFERENCES

A.   The Li Reference

The Examiner alleges that Li teaches the claimed invention as recited in claims 1-13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Li.

Li discloses a search engine for retrieving documents pertinent to a query. The Li search engine indexes documents with terms in the hyperlink pointing to that document (Li at col. 3, lines 47-54).

However, contrary to the Examiner's allegations, Li does not teach or suggest *"means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, for selectively executing at least one of: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set"*, as recited in claim 1 and similarly recited in claims 20 and 39.

Nor does Li teach or suggest *"means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set"* as recited in claim 71 and similarly recited in claims 72-73.

Nor does Li teach or suggest *"computing authoritativeness values for web pages in said initial set of web pages based on links between said web pages in said initial set of web*

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pages, and other web pages" as recited in claim 74.

Nor does Li teach or suggest "*identifying an initial set of web pages comprising web pages selected based on a key-word based query, web pages which link to said web pages selected based on said key-word based query and web pages which are linked to from said web pages selected based on said key-word based query*", as recited in claim 75.

As noted above, conventional computer systems obtain a plurality of documents including linked documents, linking documents, and linked and linking documents. Such conventional systems rank documents based only on the quality of the backlinks to the documents.

The claimed invention, on the other hand, may include selectively executing at least one of: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and producing second authoritativeness information about a set of information resources having links that point to resources of the input set (Kleinberg at col. 4, lines 53-62). In another aspect, the claimed invention may include executing: producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set (Kleinberg at col. 6, lines 44-49; Figure 3). In another aspect, the claimed invention may include computing authoritativeness values for web pages in said initial set of web pages based on links between said web pages in said initial set of web pages, and other web pages (Kleinberg at col. 8, lines 33-38). In another aspect, the claimed invention may include identifying an initial set of web pages comprising web pages selected based on a key-word based query, web pages which link to said web pages selected based on

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<u>said key-word based query and web pages which are linked to from said web pages selected</u>

<u>based on said key-word based query</u> (Kleinberg at col. 4, lines 44-65).

Clearly, Li does not teach or suggest these novel features. Indeed, as noted above, the

Li search engine merely indexes documents <u>with terms in the hyperlink pointing to that</u>

<u>document</u>. Thus, nowhere does Li teach or suggest the above-referenced novel features.

The Examiner attempts to rely on Figure 6 to support his allegations. However,

nowhere in Figure 6, or anywhere else for that matter, does Li teach or suggest the above-

referenced novel features. Indeed, Li is clearly unrelated to the claimed invention.

Therefore, Applicant submits that there are elements of the claimed invention that are

not taught or suggest by Li. Therefore, the Examiner is respectfully requested to withdraw

this rejection.

B.   The Page Reference

The Examiner alleges that Page teaches the claimed invention as recited in claims 1-

13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the

claimed invention which are neither taught nor suggested by Page.

Page discloses a method for ranking nodes in a linked database. Specifically, in the

Page method, for a plurality of linked and linking documents (the linked documents being

pointed to by a link in the linking documents) <u>a linked document is assigned a score based on</u>

<u>the scores of the linking documents</u> (Page at col. 8, lines 55-66).

However, contrary to the Examiner's allegations, Page does not teach or suggest

"means, provided on the recording medium, for directing the computer system to use the

initial authoritativeness information as input authoritativeness information, for selectively

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executing at least one of: producing first authoritativeness information about a set of

information resources pointed to by links in resources of the input set; and producing second

authoritativeness information about a set of information resources having links that point to

resources of the input set", as recited in claim 1 and similarly recited in claims 20 and 39.

Nor does Page teach or suggest *"means, provided on the recording medium, for*

directing the computer system to use the initial authoritativeness information as input

authoritativeness information, to execute: producing first authoritativeness information about

a set of information resources pointed to by links in resources of the input set; and producing

second authoritativeness information about a set of information resources having links that

point to resources of the input set" as recited in claim 71 and similarly recited in claims 72-

73.

Nor does Page teach or suggest *"computing authoritativeness values for web pages in*

said initial set of web pages based on links between said web pages in said initial set of web

pages, and other web pages" as recited in claim 74.

Nor does Page teach or suggest *"identifying an initial set of web pages comprising*

web pages selected based on a key-word based query, web pages which link to said web

pages selected based on said key-word based query and web pages which are linked to from

said web pages selected based on said key-word based query", as recited in claim 75.

As noted above, conventional computer systems obtain a plurality of documents

including linked documents, linking documents, and linked and linking documents. Such

conventional systems rank documents based only on the quality of the backlinks to the

documents.

The claimed invention, on the other hand, may include selectively executing at least

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one of: producing first authoritativeness information about a set of information resources

pointed to by links in resources of the input set, and producing second authoritativeness

information about a set of information resources having links that point to resources of the

input set (Kleinberg at col. 4, lines 53-62). In another aspect, the claimed invention may

include executing: producing first authoritativeness information about a set of information

resources pointed to by links in resources of the input set; and producing second

authoritativeness information about a set of information resources having links that point to

resources of the input set (Kleinberg at col. 6, lines 44-49; Figure 3). In another aspect, the

claimed invention may include computing authoritativeness values for web pages in said

initial set of web pages based on links between said web pages in said initial set of web

pages, and other web pages (Kleinberg at col. 8, lines 33-38). In another aspect, the claimed

invention may include identifying an initial set of web pages comprising web pages selected

based on a key-word based query, web pages which link to said web pages selected based on

said key-word based query and web pages which are linked to from said web pages selected

based on said key-word based query (Kleinberg at col. 4, lines 44-65).

Clearly, Page does not teach or suggest the novel features of the claimed invention.

Indeed, Page merely teaches obtaining a plurality of documents including linked documents,

linking documents, and linked and linking documents, and ranking a document based only on

the quality of the backlinks to the document (Page at Abstract; col. 3, lines 20-30).

Further, Page may disclose "obtaining a plurality of documents" (Page at col. 8, line

57). However, nowhere does Page disclose how those documents may be obtained.

The Examiner attempts to rely on Figure 3, col. 4, lines 5-49, col. 6, lines 11-55, col.

7, lines 23-5, and col. 8, lines 10-41 to support his position. However, neither the figure nor

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any of these passages teach or suggest the above-referenced novel features of the claimed

invention.

For example, Figure 3 merely shows a flowchart in which step 101 includes

"SELECT AN INITIAL N-DIMENSIONAL VECTOR p_0". However, nowhere does the

Figure explain how the vector may be selected. Further, the passage at col. 4, lines 5-49

merely discusses documents A, B and C. However, nowhere does the passage discuss how

these documents are obtained. Further, columns 6-8, like col. 4 merely discuss Documents A,

B and C, but do not discuss their origin. Indeed, this is an important difference between the

claimed invention and the Page system.

Therefore, Applicant submits that there are elements of the claimed invention that are

not taught or suggest by Page. Therefore, the Examiner is respectfully requested to withdraw

this rejection.

C.   The Brown Reference

The Examiner alleges that Brown teaches the claimed invention as recited in claims 1-

13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the

claimed invention which are neither taught nor suggested by Brown.

Brown discloses a system for identifying and hierarchically grouping one or more

objects that are topically relevant to a user query and/or have a structural relation to one

another (Brown at Abstract).

However, contrary to the Examiner's allegations, Brown does not teach or suggest

"*means, provided on the recording medium, for directing the computer system to use the*

initial authoritativeness information as input authoritativeness information, for selectively

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executing at least one of: producing first authoritativeness information about a set of

information resources pointed to by links in resources of the input set; and producing second

authoritativeness information about a set of information resources having links that point to

resources of the input set", as recited in claim 1 and similarly recited in claims 20 and 39.

Nor does Brown teach or suggest *"means, provided on the recording medium, for*

directing the computer system to use the initial authoritativeness information as input

authoritativeness information, to execute: producing first authoritativeness information about

a set of information resources pointed to by links in resources of the input set; and producing

second authoritativeness information about a set of information resources having links that

point to resources of the input set" as recited in claim 71 and similarly recited in claims 72-

73.

Nor does Brown teach or suggest *"computing authoritativeness values for web pages*

in said initial set of web pages based on links between said web pages in said initial set of

web pages, and other web pages" as recited in claim 74.

Nor does Brown teach or suggest *"identifying an initial set of web pages comprising*

web pages selected based on a key-word based query, web pages which link to said web

pages selected based on said key-word based query and web pages which are linked to from

said web pages selected based on said key-word based query", as recited in claim 75.

Clearly, Brown does not teach or suggest these novel features of the claimed

invention. Indeed, as noted above, Brown merely discloses a system for identifying and

hierarchically grouping one or more objects that are topically relevant to a user query and/or

have a structural relation to one another. Thus, Brown is completely unrelated to the claimed

invention.

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Therefore, Applicant submits that there are elements of the claimed invention that are

not taught or suggest by Brown. Therefore, the Examiner is respectfully requested to

withdraw this rejection.

## III.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-75, all the claims presently

pending in the application, are patentably distinct over the prior art of record and are in

condition for allowance.   The Examiner is respectfully requested to pass the above

application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance,

the Examiner is requested to contact the undersigned at the local telephone number listed

below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit

any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: __5/17/04__
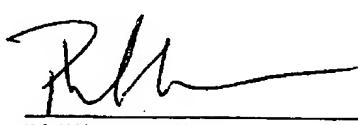
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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Charles Rones, Group Art Unit #2175 at fax number (703) 872-9306 this __/7ᵗʰ__ day of __May_____, 2004.
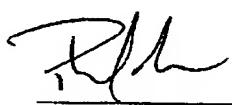
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